



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

August 16, 1994

MEMORANDUM

SUBJECT: French Limited Superfund

FROM: Judith Black (6H-ET)
Remedial Project Manager

TO: Allyn M. Davis, Director (6H)
Hazardous and Solid Waste Division
Region 6

THRU: Sam Becker, Chief (6HE)
Superfund Enforcement Branch

ATTENTION: Randy Brown

A residential domestic well near the French Limited site recently had a detected concentration of 7 ppb vinyl chloride during one of the routine sampling events. The MCL for vinyl chloride is 2 ppb. EPA tasked the French Limited Task Group (FLTG, Inc.) to assess the potential adverse health effects from the domestic well. The FLTG, Inc. gathered additional data and performed a risk analysis that examined exposure to vinyl chloride from inhalation during such activities as showering.

The results of the FLTG, Inc. risk analysis indicated that there was no unacceptable health risk from the showering with water from the domestic well (5 additional cancer cases in 10 million individuals. The FLTG, Inc. found that the risk from inhalation was less than the risk from oral ingestion. This finding differs from other experiences in Region 6 (i.e., Reese Air Force Base).

The significant difference between the two risk analyzes is that Reese Air Force Base risk assessment was based on modelled air concentrations; whereas, FLTG, Inc. used actual measured air concentrations taken in the shower at the affected home. The data was then used in the risk assessment formula. The modelled air concentration was based on conservative default assumptions which could predict higher air concentrations than may be seen in actuality.

FLTG placed the home with the affected drinking water and the next door residence (the Mother-in-Law) on bottled water as soon as the initial positive test results were received. FLTG is now planning to install (and pay for) a deep potable water well at the affected residence. The shallow well will be plugged. This measure is for gradient control as FLTG continues to pull the plume back towards the site boundary.

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